Revised Water Quality Criteria for Total PCBs

Delaware River Basin Commission

Parameter	Cancer Potency Factor	BCF/BAF	% Lipid of Consumed Fish	Consumption Rate (Grams/day)	Basis for Consumption Rate	Freshwater Criteria (picograms/l)		Marine Criteria (picograms/l)
						Fish & Water Ingestion (Zones 2 & 3)	Fish Ingestion Only (Zones 4 & 5)	Fish Ingestion Only
Total PCBs	7.70e+00	31200ª	3.0	6.5	Old default value	44.4	44.8	-
Total PCBs	7.70e+00	31200ª	3.0	37.0	Current DRBC value	-	-	7.9
Total PCBs - Averag (Dec. 2002)	2.00e+00	415,604 ^b 293,645 ^c	8.6 ^b 7.1 ^c	17.5 (50% - Level 3 and 4)	National default Estuary-Specific Data DNREC data	5.6	5.6	-
Total PCBs - Average (Feb. 2003)	2.00e+00	335,385 ^b 216,644 ^c	8.6 ^b 7.1 ^c	17.5 (50% - Level 3 and 4)	National default Estuary-Specific Data DNREC data	7.2	7.2	-
Total PCBs - Average (March 2003)	2.00e+00	165,477 ^b 76,646 ^c	3.9 ^b 2.5 ^c	17.5 (50% - Level 3 and 4)	National default Estuary-Specific Data DNREC data	17.6	17.6	-
Total PCBs - Average (July 2004)	2.00e+00	165,477 ^b 76,646 ^c	3.9 ^b 2.5 ^c	19.8 (50% - Level 3 and 4)	Estuary-Specific Data PSU Data(8 oz. portion)	15.1	15.1	-

a - BCF from 1980 Ambient Water Quality Criteria document.

Notes: The original values were developed using ambient water concentrations measured by Rutgers University in November of 2001.

The Feb. 2003 values were developed using ambient water concentrations measured by the DRBC in September 2001 at more locations in each of the estuary zones. March2003 values were developed using percent lipid values from estuary data base of fillet samples rather than the lipid values of whole fish. Final values were developed using percent lipid values from estuary data base of fillet samples, and site-specific consumption rate data obtained from a fish consumption study conducted by Penn State University.

b - BAF for trophic level 3 (mean of Fall 2001 and Spring 2002).

c - BAF for trophic level 4 (mean of Fall 2001 and Spring 2002).